

at "Gumfudda" by Hemprich and Ehrenberg. Thus it is probable that the little Bee-eaters recently collected by Mr. Philby in the mountain valleys of the Mecca district represent typical *cyanophrys*, and if those of the southern part of Arabia are really distinct they should be called *muscatensis* Sharpe.

Mr. W. L. SCLATER gave an account of Mr. R. E. Moreau's recent expedition to the central northern highlands of Tanganyika Territory, and exhibited and described one new species and five new subspecies in their joint names:—

"Recently (6th Ann. Rep. East Afr. Agric. Res. Sta.)," writes Mr. Moreau, "I drew attention to the fact that the forested mountains along the Rift Valley of northern Tanganyika Territory were virgin ground ornithologically. Their size, up to over 11,000 feet, made them intrinsically the most promising area left unworked in East Africa, and also their situation is such that ignorance of their fauna made a serious gap in our knowledge of the distribution of montane birds. The forests in question form a scattered group separated by about 100 miles of comparatively low dry steppe from those of Kilimanjaro and Meru, by quite 300 miles from the Kivu forests on the west, and by 200 miles from the highlands of south-west Tanganyika Territory recently worked by Loveridge and by Lynes. On the north a connection above 5000 feet exists with the Kenya Highlands, over grassland with forest patches at long intervals.

"In all about 500 birds were collected in the Mbulu District. They contain no startling novelties, though there are certain new races which Mr. Sclater is describing in our joint names. I hope to be able to describe the collection with Mr. Sclater's assistance, and to give some ecological account of the area in the pages of 'The Ibis.' The whole question of the distribution of montane forms in Tanganyika Territory also merits further comprehensive treatment in the light of the local contributions of recent years.

"We travelled from Arusha to Oldeani on December 28, over the immense open spaces of the Masai steppe, recently refreshed to a beautiful green after a long drought. Under

these conditions it is reminiscent of Salisbury Plain (likewise a country of Larks and Plovers), on a vaster scale, and diversified by the volcanic masses of Burka, Essimigor, and Lol-Kissale. The country in general tilts gently westwards, fetching up abruptly at the western wall of the Rift, with Lake Manyara, mostly a glittering salt incrustation, at its base. Northward and southward the precipitous line of the Wall extends to the limits of the view, with the Loolmalassin-Oldeani chain of volcanoes piled on the top. When we returned a month later conditions had already changed. The great steppe was burnt and brown, the north-east monsoon was blowing with full violence, and clouds of dust were being whirled across the country, especially from the basins of the dried-up lakes.

“We stayed ten days on Major Braunschweig’s coffee plantation at 5500 feet, right on the lower edge of the Oldeani forest. The transition in soil, climate, vegetation, and birds within the space of 1500 feet and less than 3 miles is there remarkably abrupt. From the short-grass savannah at 4000 feet one passes up through the belt of coffee plantations to a fine rain-forest or, perhaps more correctly, cloud-forest. The last couple of thousand feet of Oldeani Mountain, *i. e.*, above 8000 feet, is covered with a pure stand of bamboo, which has given the mountain its name (in Masai).

“The lower part of the forest was inhabited by several members of the familiar East African highland community, with three remarkable additions, the Green-headed Sunbird, *Cyanomitra verticalis viridisplendens*, the exquisite little Blue Flycatcher, *Erannornis albicauda kivuensis* (known only from much farther west), and an *Apalis*. This, the common Long-tailed Warbler of the tree-tops, turned out to be *Apalis alticola*, a species from the neighbourhood of Lake Nyasa.

“In the main forest the deep slow bark of *Turacus schalowi* was the commonest sound. *Apalis thoracica griseiceps*, *Arizelocichla n. nigriceps*, and other birds were found breeding. The local Olive Thrush turned out to be new, an abnormally dull-coloured race. The White-eyes are puzzling; they seem to be near *Zosterops virens kikuyuensis*, and certainly are very different from the race on Kilimanjaro and Meru. Three of the

common birds struck me as anomalous in those surroundings—the Broad-billed Roller (*Eurystomus afer*), the Spectacled Weaver (*Ploceus ocularis*), and a Crested Flycatcher (the coastal, not the highland form of *Trochocercus bivittatus*). I should have expected *T. albonotatus*.

“On January 8 we moved from Major Braunschweig’s plantation and camped at 7500 feet on the north side of the mountain, and on the lip of the great Ngorongoro Crater. It was a glorious place and an exciting one, bitterly cold at night and bracing by day, with wide expanses of short turf and immense views across the crater to piled-up volcanoes with grand names like Olossirua and Ololmoti. In patches of rank grass the big Whydah (*Drepanoplectes jacksoni*) was still in mixed flocks, but preparing to breed. This is a long way south of its recorded range in central Kenya. In the ragged remains of forests we got the first of the new dark Woodpecker, a race of *Yungipicus obsoletus*, alongside such familiar birds as Guinea Pigeons, *Cinnyris m. mediocris* in swarms, and, to our surprise, Black-shouldered Kites (*Elanus caeruleus*). Mixed with bracken on some of the open slopes great masses of a lemon-yellow *Crotolaria* were in flower and full of Golden Sun-birds (*Drepanorhynchus reichenowi*). Stonechats, Streaky Serins (*Poliospiza striolata*), *Ploceus reichenowi*, and *Cisticola hunteri priniioides* were the chief inhabitants of the rank herbage. The interior of the Ngorongoro caldera held little in the way of birds, but on the precipitous slopes we got *Enanthe schalowi*, in quite a new locality for it.

“The road to Mbulu runs through dry savannah and over terribly eroded hill-sides, where Palæarctic migrants, the Yellow Wagtails, Rollers, Kestrels, Swallows, Wheatears, and White Storks seemed greatly to outnumber the native species. At Mbulu, which is cursed with a raving dust-laden wind nine months in the year, we divided our brief time between the Nou Forest and Tlawi Lake. The forest fauna proved to be similar to that at Oldeani; but we made two unexpected discoveries—White-headed Bank-Martins (*Psaldiprocne albiceps*) and a form of *Bessonornis grotei*, a species hitherto known only from the Ulugurus and the Porotos, and not represented in the Museum. It was attending driver ants

along with Bush Robins (*Pogonocichla stellata*). In this forest, as on Oldeani, the omissions were unexpected—no large Woodpecker, no Barbet of any kind, no Parrot, and no Drongo. Moreover, it seems certain that *Colobus* monkeys are absent.

“On our return journey to Amani, after a couple of days by Bassoda Lake at the foot of Ufiome, we paid a brief visit to Mt. Meru in order to verify that the differences we had observed in the Mbulu group of forests, and particularly the omissions that had struck us there, were not due merely to our lack of observation. After a few hours’ work we had found the *Colobus*, the Barbets, the Woodpeckers, and the other birds we had failed to observe on the other mountains; and we conclude, therefore, that their faunal peculiarities are indeed as marked as they appeared.”

Turdus olivaceus oldeani, subsp. nov., Sel. & Moreau.

Description.—General colour above dark ashy black without any trace of the greenish tinge which can be always seen in the other races—*elgonensis*, *deckeni*, *roehli*, *uluguru*, and *nyikæ*; below, a paler ashy throughout from the chin to the under tail-coverts, with a faint brownish-sepia wash on the flanks only; no chestnut as in *deckeni*, *elgonensis*, and *uluguru*; throat with fairly well-marked dusky shaft-stripes. Under wing-coverts chestnut as in the other races, but this colour not extending on to the lining of the quills. Bill orange; feet yellow-brown.

Type, no. 2593, an adult male obtained by Mr. Moreau’s collector in Oldeani Forest, Mbulu district, Tanganyika Territory, at 6500 feet, on Sept 6, 1934. Brit. Mus. Reg. no. 1935.10.11.1.

Measurements of type.—Total length (of skin) 240 mm.; wing 115; tail 95; culmen 12; tarsus 29.

Remarks.—Six examples were obtained, two males and one female from Oldeani, one from Ngorongoro Crater, and two from Nou Forest, near Mbuli, all localities in the Mbulu district of Tanganyika, between 3° and 4° S. lat. and 35° and 36° E. long.

Zosterops virens mbuluensis, subsp. nov., Sel. & Moreau.

Description.—Resembling *Z. v. kikuyuensis* in most respects,

but the front half of the crown not yellow, well defined from the posterior half, but slightly and gradually more tinged with orange wash over the green. It has the wide and very conspicuous band of white feathers round the eye, but the yellow of the underparts is distinctly duller. From *Z. v. eurycricotus* it differs in the orange-yellow, not sepia-brown, wash on the forehead, but the yellow of the underparts is of a similar tinge. *Z. v. usambaræ* has not got the heavy white eye-band and has the head the same colour as the back. It is also a small bird with a shorter tail.

Type, no. 2664, an adult male obtained by Mr. Moreau's collector in Oldeani Forest, at about 6900 feet, on Sept. 6, 1934. Brit. Mus. Reg. no. 1935.10.11.2.

Measurements.—Wing 65 mm.; tail 52; culmen 10; tarsus 20. The wings of the other males varied from 60–65 mm., and the females from 60–64 mm.

Remarks.—Mr. Moreau has sent a good series of this White-eye from the Mbulu district. Four (2 ♂♂, 2 ♀♀) from Oldeani, six (4 ♂♂, 2 ♀♀) from Nou, and three (2 ♂♂, 1 ♀) from Ubiome; the last three are slightly more yellow on the front half of the crown, showing an approach to *Z. v. kikuyuensis*. These, taken in January, are marked "breeding," while the others, taken in August and September, have the sexual organs "not enlarged" or "slightly enlarged."

This race appears to range as far east as the Paré Mts., but is not found on Kilimanjaro and Meru, which more or less intervene between. How this anomalous state of things can be explained must for the present be left unsolved. Perhaps Mr. Moreau will be able to throw some light on the matter later on.

***Zosterops virens meruensis*, subsp. nov., Scl. & Moreau.**

Description.—Resembling *Z. v. eurycricotus* from Kilimanjaro, with the broad white eye-ring, but much duller and more leaden in tone both above and below; the front of the crown neither bright yellow as in *Z. v. kikuyuensis* nor sienna-brown as in *Z. v. eurycricotus*, but practically the same colour as the rest of the upper parts; the underparts are dull green with a greyish wash, and show no trace of the bright yellow characteristic of the other races. Bill and feet black.

Type, no. 3086, obtained at Nguru Narok Forest, Mt. Meru, at 6000 feet, on Jan. 26, 1935, by Mr. R. E. Moreau. Brit. Mus. Reg. no. 1935.10.11.6.

Measurements.—Wing 60 mm.; tail 50; tarsus 20; culmen 11. The female also has a wing of 60 mm.

Remarks.—In addition to the type a female was obtained on the previous day; in both cases the birds were breeding.

The White-eyes of Kenya and northern Tanganyika are very puzzling; there is much variation within a fairly restricted area and the variations appear to be fairly constant. Of the group with a broad white eye-ring we have the following :—

- (1) *Z. v. kikuyuensis*: with a conspicuous and distinct yellow frontal patch; bright yellow on throat and along the central line of the breast and abdomen.

Distribution.—Central highlands of Kenya.

- (2) *Z. v. mbuluensis*: very similar, but without the distinct frontal patch, the forehead being merely somewhat brighter than the crown, but the underparts bright yellow. This bird replaces *Z. v. kikuyuensis* to the south in the Mbulu district and also in the Paré Mts. to the east, whence Mr. Moreau has sent a good series of six skins, all practically indistinguishable from the Mbulu bird.

- (3) *Z. v. eurycricotus*: rather duller, without bright yellow on the forehead or underparts, but with the forehead becoming a sienna-brown.

This race appears to be confined to Kilimanjaro.

- (4) *Z. v. meruensis*: still duller and more greyish (see above). Confined to Mt. Meru.

In addition we have *Z. v. jacksoni* in the western highlands of Kenya and *Z. v. usambaræ* in the Usambara Mts., but these are smaller and have not the characteristic broad white eye-ring.

Yungipicus obsoletus crateri, subsp. nov., Sel. & Moreau.

Description.—Resembling *Y. o. ingens* of the highlands of central Kenya, but much darker; the back very dark sepia and the wings quite black; the white superciliary line running

from the bill to a conspicuous spot above the ear-coverts in *Y. o. ingens* is in the present race nearly obsolete, and has quite disappeared in front of the eye; undersurface far more dusky than in *Y. o. ingens*, the dusky striping on the abdomen far heavier, and a dusky patch on either side of the breast; the throat also spotted with dusky. Bill black, legs grey-black.

Type, no. 2975, an adult male collected by R. E. Moreau in vestigial forest on the south-west lip of the crater of Ngongoro Volcano, in the Mbulu district of Tanganyika Territory, at 7500 feet, on Jan. 9, 1935. Brit. Mus. Reg. no. 1935.10.11.3.

Measurements of type.—Wing 88 mm.; tail 45; culmen 20; tarsus 15.

Remarks.—Another bird collected at the same place and date is sexed a female but has the characteristic red nape-patch of the male. The third example from the Nou Forest, obtained six days later, is undoubtedly a female without the red on the nape.

This is quite a distinct race and extends the range of the species farther south. The five previously described races range from Senegal to Eritrea and south to central Kenya Colony.

***Phyllastrephus orostruthus amani*, subsp. nov., Scl. & Moreau.**

Description.—Resembling *P. o. orostruthus* recently described by Mr. J. Vincent (Bull. B. O. C. liii. 1933, p. 133) from Namuli Mt., Portuguese East Africa, but the back and wings a more olive and less brownish shade of green, the crown the same but slightly darker, not sepia as in the typical race. The rump and tail only very slightly more brown than the back, not the contrasting cinnamon-brown as noted by Vincent; below the yellow is brighter and more distinct, and olive-green dappling more definite and distinct. In dimensions the wing is slightly longer and the bill and tarsus shorter than in the typical race. Iris russet, bill black, feet pale grey, with pinkish undertone.

Type, no. 3281, an adult male obtained by Mr. R. E. Moreau's collector in Amani Forest, at 3000 feet, on Aug. 2, 1935. Brit. Mus. Reg. no. 1935.10.11.4. Only the type obtained.

Measurements of type.—Total length (of skin) 178 mm.; wing 87 (against 82 in the typical race); tail 70; culmen from base of skull 16 (against 21); tarsus 22 (against 27).

Remarks.—It is very remarkable that after so many years collecting Mr. Moreau should have obtained an example of this very distinct species of Green Bulbul, hitherto only known from the single type obtained by Mr. Vincent about a thousand miles farther south in Portuguese East Africa. The new race is an excellent one and at once distinguishable, and although both the Amani and Namuli forms are based on a single example there can be no doubt of their distinctness.

Mr. Moreau writes: "I think the Bulbul must be very rare here; many Green Buleuls have been collected in the area from which the new one came, and if it had been at all common it must have been taken previously. The account my native collector gave of its song tallies well with what Mr. Vincent gathered about the Namuli bird, also from his African collector."

***Anthreptes pallidigaster*, sp. nov., Scl. & Moreau.**

Description.—Upper parts and wings sooty-brown; the head, mantle, least wing-coverts, throat, and upper breast with a steel-green gloss with violet reflections, strongest on the throat; rest of underparts greyish-white, the bases of the individual feathers sooty; tail deep blue; pectoral tufts scarlet-vermilion; under wing-coverts silky white; a pale border to the inner webs of remiges. Bill, legs, and feet black.

Type.—Male, apparently adult, Amani, no. 3309, obtained by Mr. Moreau's collector in lowland evergreen forest in the Sigi Valley, about 4 miles east of Amani, altitude 1700 feet, on Aug. 9, 1935. Brit. Mus. Reg. no. 1935.10.11.5.

Measurements.—Wing 53 mm.; culmen 12; tail 32; tarsus 13.

Remarks.—That acute collector Salimu Asmani, who recognized this Sunbird as new, obtained two other birds at the same time out of a party of six. The female has fully as much gloss as the type male, with a particularly rich violet gloss on the throat, but the scarlet pectoral tufts are reduced to the merest vestiges and the measurements are appreciably

smaller : wing 49 mm., culmen 11.5, tail 32. The second male agrees exactly with the type except that it has slightly less gloss.

This little Sunbird is a very remarkable discovery. It is quite unlike any other species hitherto described. It has the bill of *Anthreptes*, short and hardly curved at all, the lower line of the lower mandible being nearly straight. The general coloration reminds one of *Cinnyris albiventris*, but it has a very much shorter bill and is altogether a very different bird structurally.

Other interesting birds in the Mbulu collection of Mr. R. E. Moreau are :

(1) *APALIS THORACICA GRISEICEPS*.

Seven examples. These appear to be identical with topotypes of this race from Kilimanjaro, while the Usambara birds appear to have darker crowns and less green on the back ; but the material available from these last two localities is not sufficient to settle this point and as to whether the Usambara birds deserve racial distinction.

(2) *APALIS ALTICOLA*.

A good series of eight examples. Previously the British Museum had only the type from Nyasaland and an example from Kambove. These skins are, therefore, welcome additions to the British Museum collection.

(3) *BESSONORNIS GROTEI*.

Two skins of this handsome Robin-Chat from the Nou Forest are new to the British Museum collection. The bird was described in 1895 by Reichenow under the name of *Callene albigularis* from the Uluguru Hills. As the name had been previously used Dr. Reichenow changed it (Verh. Orn. Ges. Bay. xix. 1932, p. 584) to *Bessonornis grotei*. When an opportunity occurs Mr. Moreau's skins should be compared with the type in the Berlin Museum.

(4) CAMPEPHAGA QUISCALINA MÜNZNERI.

A pair of these fine Cuckoo-Shrikes from Oldeani Forest, at 6500 feet, are a useful addition to the collection of the Natural History Museum. The race was represented previously by only a pair of males from Uluguru Mts.

Mr. SCLATER further sent the following correction :—

DIOPTROORNIS AMANI.

I have again examined the type of *Dioptrornis fischeri amani* (Sclater, Bull. B. O. C. li. 1931, p. 112), and I regret to have to confess that a mistake was made in describing it. It is undoubtedly identical with *Alseonax cinereus kikuyuensis*, which has a wide distribution through eastern and south Africa from the eastern parts of Kenya southwards to Damara-land and Portuguese East Africa.

Mr. N. B. KINNEAR exhibited several birds, and made the following remarks :—

(1) Mr. T. H. Manning, who recently spent nearly two years on Southampton Island, has presented to the British Museum a valuable collection of birds, including the young of several Geese, Ducks, and Gulls. As some of these are birds on the British List I am exhibiting the nestlings of the Lesser Snow Goose (*Chen hyperborea*), the Blue Goose (*Chen caerulescens*), the King Eider (*Somateria spectabilis*), and the chick and juvenile of Sabine's Gull (*Larus sabini*). There is also a juvenile and adult Grey Phalarope (*Phalaropus fulicarius*), and a male with undeveloped sexual organs in winter plumage, shot on June 26.

(2) During this last breeding season His Grace the Duke of Bedford has been kind enough to send to the Museum any young birds which have died at Woburn and were wanted for the collection. In this way we have received downy young of both the Red-breasted Goose (*Branta ruficollis*) and the Emperor Goose (*Philacte canagica*), not previously represented in the collection.

Mr. KINNEAR further exhibited a drawing belonging to Mr. J. H. Fleming of an apparently extinct Flightless Duck